PATENT ABSTRACTS OF JAMAN

(11) Publication number:

2002-090103

(43) Date of publication of application: 27.03.2002

(51)Int.Cl.

G01B 5/06 G07D 7/16

(21)Application number: 2000-

(71)Applicant: TOSHIBA CORP

277113

(22) Date of filing:

12.09.2000 (72)Inventor: AOKI TAKESHI

SUZUKI HIDETAKE

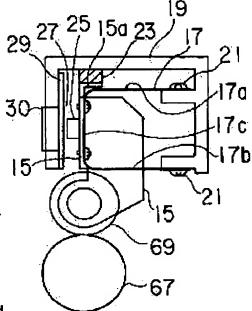
(54) DETECTION DEVICE FOR THICKNESS OF PAPER SHEET

(57) Abstract:

PROBLEM TO BE SOLVED: To precisely detect the displacement of a detection roller with a simple structure without requiring a

retaining lever.

SOLUTION: This device comprises a thickness detecting means 4A for displaying detection rollers 69 and 69 by passing a bill carried along a carrying surface between a reference roller 67 and the detection rollers 69 and 69 and detecting the thickness of the bill by the displacement quantity; and a sensor case 19 for supporting the detection rollers 69 and 69 through a plate spring 17. The plate spring 17 comprises upper and lower plate spring parts 17a and 17b arranged opposite to each other in parallel to the carrying surface with a space and



having one-side ends fixed to the sensor case 19, and a vertical spring part 17c arranged vertically to the detection rollers 69 and 69 to mutually connect the other ends of the upper and lower plate spring parts 17a and 17b and interlocking with the displacing operation of the detection rollers 69 and 69. The thickness detecting means 4A comprises a detection sensor 27 for detecting the thickness of the bill by detecting the displacement of the vertical connection part 17c.

LEGAL STATUS

[Date of request for examination]
[Date of sending the examiner's decision of rejection]
[Kind of final disposal of application other than the examiner's decision of rejection or application converted

registration]
[Date of final disposal application]
[Patent number]
[Date of registration]
[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office